

JSD  
6 NOV

CONFIDENTIAL

October 31, 1967

Declass Review by NGA.

25X1

[redacted]  
Post Office Box 6788  
Fort Davis Station  
Washington, D. C. 20020

25X1

Attention: [redacted]

25X1

Subject: [redacted]

Gentlemen:

Enclosed is one copy of our Acceptance Test Procedure for the subject contract. Under separate cover one copy is also being sent directly to your technical representative.

Please notify me at your earliest convenience if this proposed procedure is acceptable.

Very truly yours,

25X1

[redacted]  
Enc.

Program Administrator  
Photogrammetric and Military  
Systems

cc: Ed D

CONFIDENTIAL

Group 1  
Excluded from automatic  
downgrading and  
declassification

ACCEPTANCE TEST PROCEDURE

For

ANAMORPHIC ATTACHMENT

For

High Power Stereoviewer

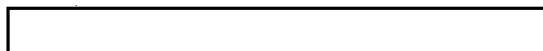


25X1

Test performed by \_\_\_\_\_ DATE \_\_\_\_\_

\_\_\_\_\_  
DATE \_\_\_\_\_

Anamorphic Attachment Accepted \_\_\_\_\_ DATE \_\_\_\_\_



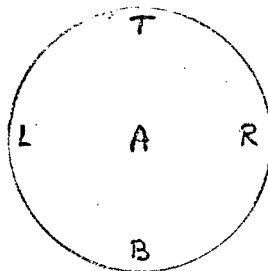
25X1

## Acceptance Test Procedure for Anamorphic Attachment

The tests will be performed using the standard  High Power Stereoviewer equipped with  objectives and eyepieces except as noted.

## 1. Resolution

Resolution will be measured axially and at four places at the edge of the field as illustrated in the sketch of the field.



The resolution values of the HPSV without the Anamorphic Attachment will be considered as the reference values. The resolution read with the Anamorphic Attachment in place will be compared with the reference values. The resolution values of the HPSV with Anamorphic Attachment should be at least 90% of the resolution values of the HPSV. A high contrast, black bars on clear background, target will be used.

Objectives	Zoom Setting	HPSV Resolution at Field Position					HPSV With Anamorphic Attachment					Accept	Reject
		A	L	R	T	B	A	L	R	T	B		
3X	1X												
3X	2X												
6X	1X												
6X	2X												
10X	1X												
10X	2X												

Comments: USE 10X & 6X EYEPIECES + 1.3X  OBJECTIVE

-2-

## 2. Field Size

A scale will be placed in the object plane and the field size will be measured. The Anamorphic Attachment shall not cause more than a 5% loss of field when compared with the standard HPSV.

Objectives	Zoom Setting	HPSV	HPSV With Anamorphic Attachment	Accept	Reject
		Field Size in mm			
3X	1X			_____	_____
3X	2X			_____	_____
6X	1X			_____	_____
6X	2X			_____	_____
10X	1X			_____	_____
10X	2X			_____	_____

Comments:

## 3. Anamorphic Magnification

In this test a ☐ 10X wide field eyepiece will be used instead of the ☐ eyepiece. Its purpose is to accept a scale which will be used for measuring the lengths of perpendicular meridians. A suitable scale or grid will be used in the object plane. The ratio of the lengths of perpendicular meridians is a measure of the Anamorphic Magnification. The Anamorphic Magnification range shall be from 1.0 to 2.2X.

25X1

25X1

-3-

## HPSV WITH ANAMORPHIC ATTACHMENT

	Anamorphic Scale Setting	Calculated Anamorphic Magnification (Ratio of Perpendicular Meridians)	Accept	Reject
3X obj.	1.0		_____	_____
	1.2		_____	_____
1X Zoom Setting	1.4		_____	_____
	1.6		_____	_____
	1.8		_____	_____
	2.0		_____	_____
	2.2		_____	_____

Comments:

## 4. Eye Point Extension and Eye Relief

The difference in length between the standard HPSV eyepoint and the eyepoint of the HPSV with Anamorphic Attachment will be calculated.

Both measurements will be made relative to a fixed point on the HPSV.

	Accept	Reject
Distance with Anamorphic Attachment	_____	_____
Distance with Standard HPSV	_____	_____
Difference - Eyepoint Extension	_____	_____

The eyepoint extension shall be no more than 3 inches.

-4-

The eye relief shall be measured from the exit pupil to the eyepiece.

	Standard HPSV	HPSV with Anamorphic Attachment	Accept	Reject
Eye Relief			_____	_____

Comments:

#### 5. Interchangeability

The time required to remove the Anamorphic Attachment shall be less than five minutes, without the use of special tools.

Time Required for Removal of the Anamorphic Attachment

	Accept	Reject
_____ Minutes	_____	_____

Comments:

#### 6. Anamorphic Axis Orientation

Verification will be made that the direction of anamorphic magnification shall be rotatable through 360°.

Accept	Reject
_____	_____

Comments:

-5-

## 8. Percent Transmission

The transmission of the Anamorphic Attachment shall be determined.

A small diameter collimated beam of light will be transmitted through

the Anamorphic Attachment equipped with the  10X wide field

compensating eyepiece. The light energy will be measured and will be

compared to the light energy passing through the  10X eyepiece.

The ratio of the two values obtained will be a measure of the light transmission of the Anamorphic Attachment.

- |     |                                |                      |                      |             |                |  |
|-----|--------------------------------|----------------------|----------------------|-------------|----------------|--|
| (1) | Anamorphic Attachemtn with 10X | <input type="text"/> | Eyepiece             | Light<br>1X | Energy<br>2.2X |  |
| (2) |                                | 10X                  | <input type="text"/> | Eyepiece    |                |  |

$$\% \text{ Transmission} = \frac{(1)}{(2)} \times 100 = \underline{\hspace{2cm}}$$